

## CLAIMS

What is claimed is:

1. A plasma arc torch comprising:

a torch handle;

a torch head disposed within the torch handle;

a torch lead operable with the torch head;

a solenoid disposed within the torch handle and operable with the torch lead and the torch head to control a supply of gas; and

an activation member operable with the solenoid,

wherein the activation member activates the solenoid such that gas flow is supplied from a power supply through the torch lead and to the torch head, and the activation member deactivates the solenoid such that the gas flow is terminated.

2. A plasma arc torch comprising:

a torch handle;

a torch head disposed within the torch handle;

a torch lead operable with the torch head;

a solenoid disposed within the torch handle and operable with the torch lead and the torch head to control a supply of gas; and

a trigger system operable with the solenoid,

wherein the trigger system activates the solenoid such that gas flow is supplied from a power supply through the torch lead and to the torch head, and the trigger system deactivates the solenoid such that the gas flow is terminated.

3. A method of operating a plasma arc torch, the method comprising the steps of:

providing a source of gas;

providing an activation member operable with a solenoid disposed within a handle of the plasma arc torch; and

operating the activation member such that the solenoid is activated, thereby providing the gas to the plasma arc torch.